

IN THE CLAIMS:

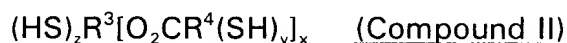
1-3 (Cancelled)

4. (Currently Amended) A polymer composition comprising:

a chlorine-containing or bromine-containing polymer; and

a heat stabilizer component consisting of a) an organic thiol compound

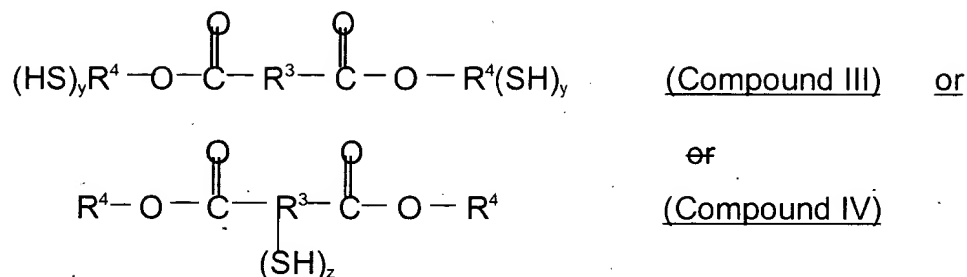
having the formula:



wherein R^3 is a straight chain or branched alkenyl having from 1 to about 20 carbon atoms, wherein each R^4 , independently, is a straight chain or branched alkyl having from 1 to 20 carbon atoms, and wherein, independently, y is either 0 or an integer up to about 10, z is either 0 or an integer up to about 10, and x is 2, wherein y or z is at least one, said organic thiol compound being present in an amount from about 1 to about 100 parts by weight per 100 parts by weight of said polymer, and optionally b) epoxidized soybean oil, with the proviso that when z is 0 and y is 1 in Compound II, R^4 is an alkyl having from 3 to 20 carbon atoms; and with the proviso that when y is 0 and z is 1 in Compound I, R^3 is an alkyl having from 3 to 20 carbon atoms.

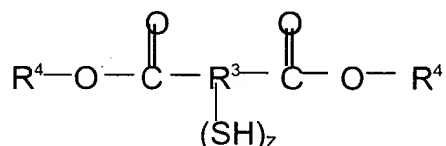
5. (Currently Amended) A polymer composition according to claim 4,

wherein said organic thiol compound has the formula:



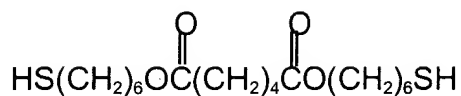
wherein R^3 is a straight chain or branched alkenyl having from 1 to about 10 carbon atoms, wherein R^4 is a straight chain or branched alkyl having from 1 to about 10 carbon atoms, and y and z , independently, are an integer from 1 to about 10, with the proviso that when the organic thiol is Compound III, R^3 is an alkyl from 3 to 10 carbon atoms, with the proviso that when the organic thiol is Compound IV, R^4 is an alkyl from 3 to 10 carbon atoms.

6. (Currently Amended) A polymer composition according to claim 5, wherein said organic thiol compound is:



wherein R^3 is ~~methylene, ethylidene,~~ propylidene, butylidene, hexylidene, or decylidene, and each R^4 , independently, is 2-ethylhexyl, methyl, ethyl, propyl, butyl, hexyl or decyl, and wherein z is 1.

7. (Original) A polymer composition according to claim 5, wherein said organic thiol compound is:



8. (Cancelled)

9. (Original) A polymer composition according to claim 4, wherein said polymer is poly(vinyl chloride), poly(vinylidene chloride), poly(vinyl bromide), poly(vinylidene bromide), chlorinated poly(vinyl chloride), chlorinated polyethylene, chlorinated natural or synthetic rubber, polychloroprene, rubber hydrochloride, chlorinated polystyrene, or copolymers thereof, or combinations thereof.

10-11 (Cancelled)

12. (Original) A composition according to claim 5, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

13. (Original) A composition according to claim 5, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.

14. (Previously Amended) A composition according to claim 4, wherein said composition includes said epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

15. (Cancelled)

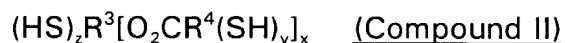
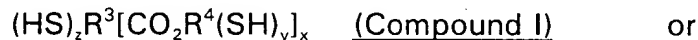
16. (Previously Amended) A composition according to claim 5, wherein said composition includes the said epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

17-22 (Cancelled)

23. (Previously Added) A composition according to claim 9, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

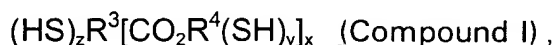
24. (Previously Added) A composition according to claim 9, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.

25. (Currently Amended) A polymer composition, comprising:
a chlorine-containing or bromine-containing polymer; and
a heat stabilizer component comprising an organic thiol compound
having the formula:

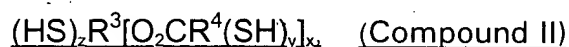


wherein R^3 is a straight chain or branched alkenyl having from 1 to about 20 carbon atoms, wherein each R^4 , independently, is a straight chain or branched alkyl

having from 1 to 20 carbon atoms and wherein, independently, y is either 0 or an integer up to about 10, z is either 0 or an integer up to about 10, wherein y or z is at least one, and x is 2, with the proviso that when said organic thiol is said:



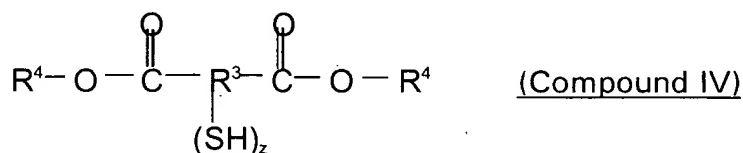
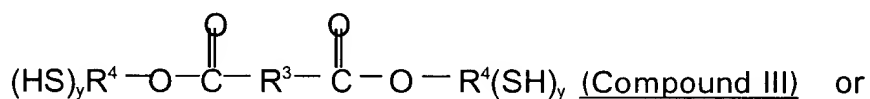
~~R³ is ethylene and y is 0 and z is 1, R⁴ R³ is an alkyl having from 6 to 20 carbon atoms;~~ and when y is 1 and z is 0, R⁴ has 4 to about 20 carbon atoms; with the proviso that when said organic thiol is said:



y is 1 and z is 0, R⁴ is an alkyl having from 3 to 20 carbon atoms,

said organic thiol compound being present in an amount from about 1 to about 100 parts by weight per 100 parts by weight of said polymer, and said composition being free of a Lewis acid and a metal-containing stabilizer.

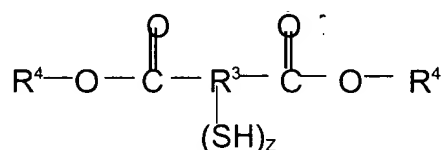
26. (Currently Amended) A polymer composition according to claim 25, wherein said organic thiol compound has the formula:



wherein R³ is a straight chain or branched alkenyl having from 1 to about 10 carbon atoms, wherein R⁴ is a straight chain or branched alkyl having from 1 to about 10

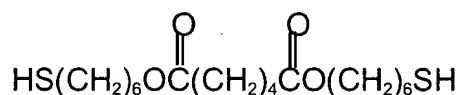
carbon atoms, and y and z, independently, are an integer from 1 to about 10, with the proviso that when ~~R³ is ethylidene~~ and z is 1 or 2, ~~R⁴~~ R³ is an alkyl having from ~~6~~ 3 to about 10 carbon atoms, and when y is 1, R⁴ has 4 to about 10 carbon atoms.

27. (Currently Amended) A polymer composition according to claim 26, wherein said organic thiol compound is:



wherein R³ is ~~methylene~~, propylidene, butylidene, hexylidene, or decylidene, and each R⁴ independently is 2-ethylhexyl, methyl, ethyl, propyl, butyl, hexyl or decyl, and wherein z is 1.

28. (Previously Added) A polymer composition according to claim 26, wherein said organic thiol compound is:



29. (Cancelled)

30. (Previously Added) A polymer composition according to claim 25, wherein said polymer is poly(vinyl chloride), poly(vinylidene chloride), poly(vinyl

bromide), poly(vinylidene bromide), chlorinated poly(vinyl chloride), chlorinated polyethylene, chlorinated natural or synthetic rubber, polychloroprene, rubber hydrochloride, chlorinated polystyrene, or copolymers thereof, or combinations thereof.

31. (Previously Added) A composition according to claim 26, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

32. (Previously Added) A composition according to claim 26, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.

33. (Previously Added) A composition according to claim 30, wherein said composition includes epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

34. (Previously Added) A composition according to claim 27, wherein said composition includes epoxidized soybean oil in an amount from about 1 to about 30 parts by weight per 100 parts by weight of said polymer.

35. (Previously Added) A composition according to claim 30, wherein the amount of said organic thiol is from 1 to about 50 parts by weight per 100 parts by weight of said polymer.

36. (Previously Added) A composition according to claim 30, wherein the amount of said organic thiol is from about 50 to about 100 parts by weight per 100 parts by weight of said polymer.